PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference	FOR FURTHER		see Form PCT/ISA/220					
20031T301	ACTION		as, where applicable, item 5 below.					
International application No.	International filing date (day/mont	nonth/year) (Earliest) Priority Date (day/month/year)						
PCT/IB2004/000924	19/03/2004	/03/2004 24/03/2003						
Applicant								
CLARIANT LIFE SCIENCE MOLE	ECULES (ITALIA) SPA							
This International Search Report has been according to Article 18. A copy is being tra			nority and is transmitted to the applicant					
This International Search Report consists	of a total of 8 sh	eets.						
X It is also accompanied by	a copy of each prior art document of	ited in this	report.					
Basis of the report With regard to the lenguage the	international coarsh was serviced as	aa tha ha	nia of the international application in the					
	ess otherwise indicated under this i		sis of the international application in the					
The international this Authority (Ru	search was carried out on the basis le 23.1(b)).	of a transl	ation of the international application furnished to					
b. With regard to any nucleo	otide and/or amino acid sequence	e disclosed	in the international application, see Box No. I.					
2. Certain claims were fou	2. Certain claims were found unsearchable (See Box II).							
3. Unity of invention is lac	king (see Box III).							
4. With regard to the title,								
X the text is approved as su	bmitted by the applicant.							
the text has been establis	shed by this Authority to read as followed	ows:						
			·					
		•	•					
5. With regard to the abstract,								
X the text is approved as su	• • • •	thic Author	ity on it appears in Pay No. IV. The applicant					
			ity as it appears in Box No. IV. The applicant report, submit comments to this Authority.					
6. With regards to the drawings,								
a. the figure of the drawings to be p	published with the abstract is Figure	No						
as suggested by								
	is Authority, because the applicant is Authority, because this figure bet		-					
	is Authority, because this figure bet be published with the abstract.	iei ciiaiaCl	enzes ale iliveriaon.					

International Application No PCT/IB2004/000924 . CLASSIFICATION OF SUBJECT MATTER PC 7 C07D411/04 According to International Patent Classification (IPC) or to both national classification and IPC **B. FIELDS SEARCHED** Minimum documentation searched (classification system followed by classification symbols) IPC 7 CO7D Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, CHEM ABS Data, WPI Data, PAJ, BEILSTEIN Data C. DOCUMENTS CONSIDERED TO BE RELEVANT Category ° Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. Α WO 95/29174 A (HILL MALCOLM LEITHEAD 1 - 17WHITEHEAD ANDREW JONATHAN (GB): HALLETT PETER) 2 November 1995 (1995-11-02) page 14, lines 1-5 US 6 329 522 B1 (HILL MALCOLM LEITHEAD ET Α 1 - 17AL) 11 December 2001 (2001-12-11) column 11, lines 20-42 WO 92/14743 A (UNIV EMORY) Α 1 - 173 September 1992 (1992-09-03) cited in the application figure 2 Α US 5 696 254 A (MANSOUR, TAREK ET AL) 1 - 179 December 1997 (1997-12-09) cited in the application columns 16,26; examples 16,17,20,21 Further documents are listed in the continuation of box C. Patent family members are listed in annex. Special categories of cited documents: 'T' later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the "A" document defining the general state of the art which is not considered to be of particular relevance invention "E" earlier document but published on or after the international *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to "L" document which may throw doubts on priority claim(s) or involve an inventive step when the document is taken alone

- which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- document published prior to the international filing date but later than the priority date claimed
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- "&" document member of the same patent family

Date of mailing of the international search report

Date of the actual completion of the international search

21 June 2004 01/07/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016

Authorized officer

Zellner, A

1

International Application No
PCT/IB2004/000924

Category °	ation) DOCUMENTS CONSIDERED TO BE RELEVANT Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
alegory	Chanch of Cocument, with indication, where appropriate, of the relevant passages	Helevanii to ciaim No.
Α	EP 0 515 157 A1 (BIOCHEM PHARMA INC., CAN.) 25 November 1992 (1992-11-25) the whole document	1-17
A	JEONG, L.S.; ET AL.: J. MED. CHEM., vol. 36, no. 2, 1993, pages 181-195, XP002285252 scheme 3, page 183	1-17
A	CHU, C.K.; ET AL.: J, MED. CHEM., vol. 43, no. 21, 2000, pages 3906-3912, XP002285253 page 3907, scheme 1	1-17
X	EP 0 526 253 A1 (BIOCHEM PHARMA INC., CAN.) 3 February 1993 (1993-02-03) page 3, lines 16-24	12-15
	•	
	·	
	÷	
		·
٠		

1

Information on patent family members

				10047 000924
Patent document cited in search report	Publication date		Patent family member(s)	Publication date
WO 9529174 A	02-11-1995	AP	704 A	04-12-1998
		AT	181326 T	15-07-1999
		AU	696612 B2	17-09-1998
		AU	2447195 A	16-11-1995
		BG	62810 B1	31-08-2000
		BG	100916 A	31-07-1997
		BR	9507499 A	23-09-1997
		CA	2188306 A1	02-11-1995
·		CN	1149871 A	14-05-1997
		CZ	9603096 A3	16-04-1997
		DE	69510347 D1	22-07-1999
		DE	69510347 T2	18-11-1999
		DK	757684 T3	17-01-2000
		EE	9600134 A	15-04-1997
·		MO	9529174 A1	02-11-1995
		EP	0757684 A1	12-02-1997
		ES FI	2133769 T3 964251 A	16-09-1999 22-10-1996
		GR	3031043 T3	31-12-1999
		HK	1004221 A1	11-08-2000
		HÜ	76296 A2	28-07-1997
		IL	113432 A	21-11-2000
		JP	10502615 T	10-03-1998
		NO	964487 A	17-12-1996
		NO	995646 A	17-11-1999
		NZ	285396 A	28-10-1998
		PL	316904 A1	17-02-1997
		RO	117916 B1	30-09-2002
		RO	118714 B1	30-09-2003
		RU	2158736 C2	10-11-2000
		SI	757684 T1	31-12-1999
		SK	135596 A3	09-07-1997
		TW	487704 B	21-05-2002
		US	6329522 B1	11-12-2001
		US	6051709 A	18-04-2000
		ZA	9503235 A	21-12-1995
US 6329522 B1	11-12-2001	AP	704 A	04-12-1998
·		AT	181326 T	15-07-1999
		AU	696612 B2	17-09-1998
		AU	2447195 A	16-11-1995
		BG	62810 B1	31-08-2000
		BG BR	100916 A	31-07-1997 23-09-1997
		CA	9507499 A 2188306 A1	02-11-1995
		CN	1149871 A	14-05-1995
		CZ	9603096 A3	16-04-1997
		DE	69510347 D1	22-07-1999
		DE	69510347 T2	18-11-1999
		DK	757684 T3	17-01-2000
		EE	9600134 A	15-04-1997
		WO	9529174 A1	02-11-1995
		EP	0757684 A1	12-02-1997
		ES	2133769 T3	16-09-1999
		FΙ	964251 A	22-10-1996
		GR	3031043 T3	31-12-1999
		HK	1004221 A1	. 11-08-2000
1		HU	76296 A2	28-07-1997

Information on patent family members

				FC1/1B2004/000924		3017000321
	Patent document cited in search report		Publication date		Patent family member(s)	Publication date
	US 6329522	B1		IL JP	113432 A 10502615 T	21-11-2000 10-03-1998
				NO	964487 A	17-12-1996
				NO	995646 A	17-11-1999
				NZ	285396 A	28-10-1998
				PL	316904 A1	17-02-1997
				RO	117916 B1	30-09-2002
				RO	118714 B1	30-09-2003
				RU	2158736 C2	10-11-2000
				SI	757684 T1	31-12-1999
				SK	135596 A3	09-07-1997
				TW	487704 B	21-05-2002
				ÜS	6051709 A	18-04-2000
				ZA	9503235 A	21-12-1995
	UO 001 47 42					
	WO 9214743	Α	03-09-1992	US	5210085 A	11-05-1993
				AU	1437292 A	15-09-1992
				AU	665187 B2	21-12-1995
				AU	1561792 A	15-09-1992
Ì				AU	679649 B2	03-07-1997
				AU	3794395 A	14-03-1996
				AU	8077398 A	15-10-1998
				BG	62053 B1	29-01-1999
				BG	98062 A	25-04-1994
				BR	9205661 A	24-05-1994
				CA	2104399 A1	23-08-1992
				CN	1418966 A	21-05-2003
				CN	1065065 A ,B	07-10-1992
				CN	1127301 A ,B	24-07-1996
				CN	1203232 A ,B	30-12-1998
				CZ	9200497 A3	17-03-1993
				ΕP	0575482 A1	29-12-1993
				EP	0984013 A2	08-03-2000
				FΙ	933684 A	06-09-1993
				FI	20030932 A	24-06-2003
				HU	65548 A2	28-06-1994
				HU	9500510 A3	28-11-1995
				ΙE	920545 A1	26-08-1992
				IL	100965 A	31-12-1999
				JP	3292830 B2	17-06-2002
				JP	10147586 A	02-06-1998
				JP	2901160 B2	07-06-1999
				JP	6508605 T	29-09-1994
				KR	172590 B1	01-02-1999
,				MX	9200747 A1	01-09-1992
				NO	932980 A	20-08-1993
	•			NZ	241625 A	26-03-1996
				NZ	250842 A	26-03-1996
				PL	169842 B1	30-09-1996
				PT	100151 A ,B	31-05-1993
				US	5814639 A	29-09-1998
				US	2002143194 A1	03-10-2002
				WO	9214743 A2	03-09-1992
				WO	9214729 A1	03-09-1992
				US	5892025 A	06-04-1999
				US	5852027 A	22-12-1998
				US	6703396 B1	09-03-2004
				US	6069252 A	30-05-2000
L						

Information on patent family members

					B2004/000924
Patent document cited in search report		Publication date		Patent family member(s)	Publication date
WO 9214743	A		US US US US US US	6642245 B1 5700937 A 6346627 B1 6114343 A 5827727 A 5728575 A 5914331 A	04-11-2003 23-12-1997 12-02-2002 05-09-2000 27-10-1998 17-03-1998 22-06-1999
US 5696254	A	09-12-1997		5663320 A 5693787 A 61695 B1 98310 A 9302492 A3 3044 B1 935151 A 960286 A 20001900 A 67471 A2 950172 A 170869 B1 176026 B1 116812 B1 2140925 C1 129493 A3 133958 T 157662 T 655973 B2 1639492 A 668086 B2 1639592 A 1690892 A 1691392 A 61696 B1 98311 A 2069024 A1 2069063 A1 9220696 A1 9220696 A1 9220696 A1 9220696 A1 1067245 A 1116204 A 11229078 A 1229078 A 155157 T3 0515156 T3 515157 T3 0515156 T3 515157 T3 0515156 A1 0515157 A1 2084937 T3 2104832 T3	02-09-1997 02-12-1997 31-03-1998 03-01-1995 16-03-1994 15-10-1997 19-11-1993 19-01-1996 29-08-2000 28-04-1995 30-08-1996 31-01-1997 31-03-1999 29-06-2001 10-11-1999 09-11-1994 15-02-1996 15-09-1997 19-01-1995 26-11-1992 26-04-1996 26-11-1992 30-12-1992 30-12-1992 31-03-1998 15-08-1994 22-11-1992 26-11-1992 26-11-1992 26-11-1992 26-11-1992 26-11-1992 26-11-1992 26-11-1992 26-11-1992 26-11-1992 26-11-1992 26-11-1992 26-11-1992 26-11-1992 26-11-1992

Information on patent family members

				1017182	JU4/ UUU924
Patent document cited in search report		Publication date		Patent family member(s)	Publication date
EP 0515157	A1	25-11-1992	AT	133958 T	15-02-1996
			AT	157662 T	15-09-1997
			AU	655973 B2	19-01-1995
			AU	1639492 A	26-11-1992
			AU	668086 B2	26-04-1996
			AU	1639592 A	26-11-1992
			AU	1690892 A	30-12-1992
			AU	1691392 A	30-12-1992
			BG	61695 B1	31-03-1998
			BG	98310 A	03-01-1995
			BG	61696 B1	31-03-1998
			BG	98311 A	15-08-1994
			CA	2069024 A1	22-11-1992
			CA	2069063 A1	22-11-1992
			WO	9220696 A1	26-11-1992
			WO	9220669 A1	26-11-1992
		•	CN	1067654 A ,B	06-01-1993
			CN CN	1067245 A ,B	23-12-1992
			CN	1116204 A ,B 1229078 A ,B	07-02-1996 22-09-1999
			CN	1229078 A ,B 1229079 A ,B	22-09-1999
			CN	1229079 A ,B	22-09-1999
			CZ	9302492 A3	16-03-1994
			CZ	9302492 A3	13-04-1994
			CZ	9602224 A3	14-04-1999
			CZ	285220 B6	16-06-1999
			DE	69208144 D1	21-03-1996
			DE	69208144 T2	05-09-1996
			DE	69221936 D1	09-10-1997
			DE	69221936 T2	02-01-1998
			DK	515156 T3	17-06-1996
			DK	515157 T3	29-09-1997
			EE	3044 B1	15-10-1997
			EP	0515156 A1	25-11-1992
			ES	2084937 T3	16-05-1996
			ES	2104832 T3	16-10-1997
			FI	935150 A	19-11-1993
			FI	935151 A	19-11-1993
			FI	960286 A	19-01-1996
			FI	20001900 A	29-08-2000
			GR	3018941 T3	31-05-1996
			GR HK	3024617 T3	31-12-1997 26-07-1996
			HK	132196 A 1002431 A1	21-08-1998
			HU	67726 A2	21-08-1998 28-04-1995
			HU	67471 A2	28-04-1995
			ΪΕ	921618 A1	02-12-1992
,			ĬĒ	921619 A1	02-12-1992
			IL	101931 A	05-12-1996
EP 0526253	A1	03-02-1993	AP	321 A	28-02-1994
			ΑT	227720 T	15-11-2002
			AU	659668 B2	25-05-1995
			AU	2340892 A	02-03-1993
			BG	61693 B1	31-03-1998
			BG	98616 A	31-03-1995
			CA	2114221 A1	18-02-1993
			WO	9303027 A1	18-02-1993

Information on patent family members

Patent document cited in search report	Publication date		Patent family member(s)	Publication date
EP 0526253 A1	'	CN	1302612 A	11-07-2001
		CN	1070191 A ,B	24-03-1993
		CN	1132073 A ,B	02-10-1996
·		CZ	9400203 A3	13-07-1994
1		DE	69232845 D1	19-12-2002
		DE	69232845 T2	24-04-2003
		DK	526253 T3	17-03-2003
		EE	3002 B1	16-06-1997
		EG	20193 A	30-10-1997
		EP	1155695 A1	21-11-2001
		ES	2186667 T3	16-05-2003
		FI	940435 A	28-01-1994
		HK	1008672 A1	01-08-2003
		HU	70030 A2	28-09-1995
		ĤŪ	9500707 A3	28-11-1995
		IL	102616 A	31-10-1996
		JP	2960778 B2	12-10-1999
		JP	7500317 T	12-01-1995
		KR	242454 B1	02-03-2000
	·	MA	22919 A1	01-04-1993
		MD	950114 A	28-06-1996
		MX	9204474 A1	01-12-1993
		NO NZ	940322 A 243637 A	21-03-1994 28-03-1995
		NZ OA	243637 A 9883 A	28-03-1995 15-09-1994
	•	PT	9883 A 526253 T	31-03-2003
1		RU	2126405 C1	20-02-1999
		SG	68541 A1	16-11-1999
		SK	10494 A3	07-12-1994
		JJ TJ	10494 A3 244 R3	24-11-1999
		US	244 KS 5538975 A	23-07-1996
		US	5618820 A	08-04-1997
		ZA	9205668 A	28-04-1993